

The I-15 Corridor EIS Team used a process called “screening” to compare the alternatives to each other and eliminate those that did not meet the purpose and need for the project, were not reasonable, or had unacceptable impacts to the natural or built environment. The following questions and answers help explain how the Team arrived at the five alternatives carried forward for further study.

## How were alternatives developed?

Alternatives were developed from more than 300 ideas submitted in public comments, local government and resource agency input, findings of previous planning studies and analysis of population projections, traffic projections and safety conditions.

## How many alternatives were considered?

Twenty-one alternatives were compared to each other using criteria and measurements based on the project purpose, identified needs and defined goals. The alternatives included freeway improvements only, transit improvements only, and many combinations of freeway and transit improvements.

## How were alternatives eliminated?

Criteria based on the project goals were used to decide whether or not an alternative would be eliminated or studied further in the EIS. These criteria include:

- ♣ Improves the capacity and performance of I-15
- ♣ Corrects design deficiencies on I-15
- ♣ Carries sufficient number of transit riders
- ♣ The alternative is cost-effective
- ♣ Provides improved options for making inter-county, intra-county and regional trips
- ♣ Consistency with locally adopted plans
- ♣ Avoids unacceptable environmental impacts
- ♣ Is able to incorporate sensitive designs that enhance and maintain the integrity of existing communities

## Who decided what alternatives were eliminated?

Four workshops were held with partnering agencies and resource agencies to discuss the alternatives and determine if they met the criteria based on project goals. The partnering agencies included the Federal Highway Administration, Utah Department of Transportation, Utah Transit Authority, Mountainland Association of Governments and Wasatch Front Regional Council. The participating resource agencies included the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Utah Department of Wildlife Resources and Utah Department of Environmental Quality, Utah Division of Water Quality.

## Why were 16 alternatives dropped and 5 retained?

The results of the screening process for each alternative are summarized below. Some alternatives are grouped together because they have similar characteristics.

1. No-Build: Although the “No-Build” alternative did not satisfy most of the criteria, it is required by National Environmental Protection Act (NEPA) to be studied in the EIS for comparison purposes.
2. Transportation Systems Management (TSM): The TSM alternative provided low cost improvements in the I-15 Corridor, but was unable to achieve most of the criteria established. It was also kept in the mix as required by NEPA.
3. I-15 Widening & Reconstruction: Two alternatives were considered. An alternative that widened I-15 and stayed within the existing UDOT right-of-way did not sufficiently reduce roadway congestion and was

dropped. An alternative that extends beyond the right-of-way and provides more travel lanes was retained because it improves traffic conditions and satisfies most of the criteria.

4. **New & Widened Arterials:** Four alternatives were considered that proposed new roadways and widening existing north-south arterials. All of them were dropped because they did not improve roadway congestion on I-15 and did not meet most of the criteria. The arterials alternatives considered and some additional reasons why they did not meet the criteria include:
  - a. New Highway West of Utah Lake: showed low demand on the new facility in the year 2030.
  - b. New Highway Crossing of Utah Lake: had unacceptable wetland and water resource/natural environment impacts compared with other feasible alternatives.
  - c. New Highway in East Valley Foothill Corridor: required a significant number of property displacements as compared with other feasible alternatives.
  - d. New and Widened Arterials: required a significant number of property displacements as compared with other feasible alternatives.
5. **Transit Only Alternatives:** Five alternatives were considered that tested transit-only improvements. They were all dropped because they did not improve congestion or provide design improvements to I-15, plus did not adequately meet most of the criteria. Other issues are explained below:
  - a. Commuter Rail west of I-15 + Light Rail Transit (LRT) east of I-15: Commuter Rail and LRT competed with each other for ridership, were more costly and not very cost-effective.
  - b. Commuter Rail west of I-15 + Bus Rapid Transit (BRT) on I-15: Commuter Rail and BRT competed with each other for ridership, were more costly and not very cost-effective.
  - c. Commuter Rail west of I-15: did not adequately improve congestion or provide for design improvements on I-15.
  - d. LRT east of I-15: did not adequately improve congestion or provide for design improvements on I-15.
  - e. BRT east of I-15: did not adequately improve congestion or provide for design improvements on I-15.
6. **I-15 Widening & Reconstruction + Transit East of I-15:** Five alternatives were considered and all were dropped because they provided fewer inter-county and regional trips, experienced slower travel time because of the numerous grade crossings, and had less cost-effective costs per mile than other feasible alternatives. They only partially met the criteria. The five alternatives included:
  - a. I-15 Widening & Reconstruction + LRT from Sandy to Orem
  - b. I-15 Widening & Reconstruction + LRT to Alpine + BRT to Orem east of I-15
  - c. I-15 Widening & Reconstruction + LRT to Draper + BRT on I-15
  - d. I-15 Widening & Reconstruction + BRT east of I-15
  - e. I-15 Widening & Reconstruction + Diesel Multiple Units (DMU) from Murray to Orem
7. **I-15 Widening & Reconstruction + Commuter Rail:** This alternative was retained for further study in the EIS as it met the criteria established and the study's purpose and need.
8. **I-15 Widening & Reconstruction + Widening of State Street and Geneva Road:** This alternative was dropped because it did not adequately improve congestion or provide for design improvements on I-15. This alternative caused greater environmental impacts with the widening of State Street and Geneva Road compared to other feasible alternatives.
9. **I-15 Widening & Reconstruction + BRT in Median or Adjacent to I-15:** This alternative was retained for further study in the EIS as it met the criteria established and the study's purpose and need.